SAMSUNG

SERIES 4

LED TV
user manual

Figures and illustrations in this User Manual are provided for reference only and may differ from actual product appearance. Product design and specifications may be changed without notice.
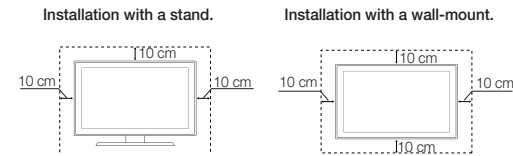
Still image warning

Avoid displaying still images (like jpeg picture files) or still image element (like TV programme logo, panorama or 4:3 image format, stock or news bar at screen bottom etc.) on the screen. Constant displaying of still picture can cause ghosting of LED screen, which will affect image quality. To reduce risk of this effect, please follow below recommendations:
• Avoid displaying the same TV channel for long periods.
• Always try do display any image on full screen, use TV set picture format menu for best possible match.
• Reduce brightness and contrast values to minimum required to achieve desired picture quality, exceeded values may speed up the burnout process.
• Frequently use all TV features designed to reduce image retention and screen burnout, refer to proper user manual section for details.

Securing the Installation Space

Keep the required distances between the product and other objects (e.g. walls) to ensure proper ventilation.
Failing to do so may result in fire or a problem with the product due to an increase in the internal temperature of the product.
✎ When using a stand or wall-mount, use parts provided by Samsung Electronics only.
✎ If you use parts provided by another manufacturer, it may result in a problem with the product or an injury due to the product falling.
✎ The appearance may differ depending on the product.
✎ Be careful when you contact the TV because some parts can be somewhat hot.

Installation with a stand.   **Installation with a wall-mount.**

BN68-04487A-01

Getting Started

Accessories

• Remote Control & Batteries (AAA x 2)
• Owner's Instructions
• Warranty Card / Safety Guide (Not available in some locations)
• Holder-Wire stand
• Power Cord

Input Cables (Sold Separately)

HDMI   HDMI-DVI   Component

Composite (AV)   Coaxial (RF)

TV Controller (Panel Key)

Down (Front)

Function menu

UA22ES4003   UA32ES4003

Left   Right

Up (Rear)

TV Controller

Remote control sensor

Power on	Turns the TV on by pressing the controller in standby mode.
Adjusting the volume	Adjusts the volume by moving the controller from side to side when the power is on.
Selecting a channel	Selects a channel by moving the controller up and down when the power is on.
Using the function menu	Press the controller when the power is on, then the function menu screen appears. If you press it again, the function menu screen disappears.
Using the Menu (⊞)	Selects the Menu(⊞) by moving the controller in the function menu screen. The OSD(On Screen Display) of your TV's feature appears.
Selecting the Source (➥)	Selects the Source(➥) by moving the controller in the function menu screen. The Source List screen appears.
Selecting the Media Play	Selects the MEDIA.P by moving the controller in the function menu screen. The Media Play main screen appears.
Power Off (⏻)	Selects the Power Off (⏻) to turn the TV off by moving the controller in the function menu screen.

✎ Exits the menu when pressing the controller more than 1 second.
✎ When selecting the function by moving the controller to the up/down/left/right directions, be sure not to press the controller. If you press it first, you cannot operate it to move the up/down/left/right directions.

Plug & Play

When you turn the TV on for the first time, a sequence of on-screen prompts will assist in configuring basic settings. Press the POWER button. Plug & Play is available only when the Input source is set to TV.
✎ Connecting the power cord and antenna. (refer to 'Connections')

Selecting a language

Select the desired OSD (On Screen Display) language.

Selecting a Home Use mode

• Select the Home Use mode. Store Demo mode is for retail environments.
• When pressing TV controller, the function menu screen appears. Select the Menu(⊞) and press it more than 5 seconds using the controller. The Store Demo mode is set. Cancel the Store Demo by selecting Source(➥) and pressing it more than 5 seconds.

Selecting an Area

Press the ► / ENTER⏎ button. Press the ▲ or ▼ button, then press the ENTER⏎ button to select the appropriate area.

Auto Store

The channel search will start automatically.

Setting the Clock Set

Press the ◄ or ► button to select Day, Month, Year, Hour and Minute. Set these by pressing the ▲ / ▼ / ◄ / ► button, and press the ENTER⏎ button to go next step.

Viewing the HD Connection Guide

The connection method for the best HD screen quality is displayed.

Enjoy your TV.

Press the ENTER⏎ button.

Connections

TV Rear Panel

Power Input

UA32EH4003

VHF/UHF Antenna

or

Cable

Media Play
Using a USB Drive

TV Rear Panel

Power Input

UA22ES4003

✎ For UA22ES4003 connection, you can refer to UA32EH4003 according to connection numbers.

AV Device (1)
Using an HDMI Cable (up to 1080p)

Blu-ray player / DVD / cable box / sat box

PC
Using an HDMI Cable or an HDMI to DVI Cable. Use the PC speakers for audio.

AV Device (2)
Using a Component Cable (up to 1080p)

Blu-ray player

AV Device (3)
Using Audio/Video Cables

VCR

✎ Note
• For better picture and audio quality, connect to a digital device using an HDMI cable.
• The picture may not display normally (if at all) or the audio may not work if an external device that uses an older version of HDMI mode is connected to the TV. If such a problem occurs, ask the manufacturer of the external device about the HDMI version and, if out of date, request an upgrade.
• Be sure to purchase a certified HDMI cable. Otherwise, the picture may not display or a connection error may occur.
• PC/DVI AUDIO IN input are not supported.
• DIGITAL AUDIO OUT(OPTICAL) is not supported.
• For HDMI/DVI cable connection, you must use the HDMI/DVI IN jack.
• Connecting through the HDMI cable may not be supported depending on the PC.
• If an HDMI to DVI cable is connected to the HDMI/DVI IN port, the audio does not work.
• SERVICE: Connector for service only.

Changing the Input Source

Source List

Use to select TV or other external input sources such as DVD / Blu-ray players / cable box / STB satellite receiver connected to the TV.
1. Press the SOURCE button.
2. Select a desired external input source.
■ TV / AV / Component / HDMI/DVI
✎ You can only choose external devices that are connected to the TV. In the Source List, connected inputs will be highlighted.

How to use Edit Name

Edit Name lets you associate a device name to an input source. To access Edit Name, press the TOOLS button in Source List. The following selections appear under Edit Name:

■ VCR / DVD / Cable STB / Satellite STB / PVR STB / AV Receiver / Game / Camcorder / PC / DVI PC / DVI / TV / IPTV / Blu-ray / HD DVD / DMA: Name the device connected to the input jacks to make your input source selection easier.
✎ When connecting a PC to the HDMI/DVI IN port with HDMI cable, you should set the TV to PC mode under Edit Name.
✎ When connecting a PC to the HDMI/DVI IN port with HDMI to DVI cable, you should set the TV to DVI PC mode under Edit Name.
✎ When connecting an AV devices to the HDMI/DVI IN port with HDMI to DVI cable, you should set the TV to DVI mode under Edit Name.

Information
You can see detailed information about the selected external device.
✎ Information only available for the current connected source.

Remote Control

✎ This remote control has Braille points on the Power, Channel, and Volume buttons and can be used by visually impaired persons.

Turns the TV on and off.
Press to directly access to channels.
Alternately select Teletext ON, Double, Mix or OFF.
Adjusts the volume.
Displays the main on-screen menu.
Views the Media Play.
Quickly select frequently used functions.
Selects the on-screen menu items and changes the values seen on the menu.
Returns to the previous menu.

Displays and selects the available video sources.
Returns to the previous channel.
Cuts off the sound temporarily.
Changes channels.
Displays channel lists on the screen.
Selects the HDMI mode directly.
Displays information on the TV screen.
Exits the menu.
Use these buttons according to the direction on screen.
Use these buttons in a specific feature.

P.MODE: Selects the picture mode.
P.SIZE: Selects the picture size.
SRS: Turns the SRS TruSurround on and off.

Installing batteries (Battery size: AAA)

✎ NOTE
• Use the remote control within 23 feet from TV.
• Bright light may affect the performance of the remote control. Avoid using nearby special fluorescent light or neon signs.
• The Colour and shape may vary depending on the model.
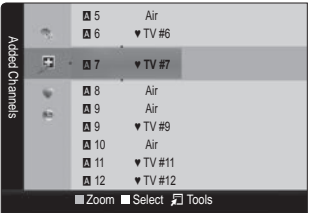

Channel Menu

❑ Seeing Channels

Channel List

Select a channel in the All Channels, Added Channels, Favourites or Programmed screen by pressing the ▲ / ▼ buttons, and pressing the ENTER⏎ button. Then you can watch the selected channel.

Channel List Option Menu TOOLS🔧

Set each channel using the Channel List menu options (Add/Delete, Add to Favourite/Delete from Favourite, Timer Viewing, Lock/Unlock, Edit Channel Name, Sort, Select All/Deselect All, Auto Store): Option menu items may differ depending on the channel status.

Set each channel using the Channel List menu options. Option menu items may differ depending on the channel status.

■ 📑 All Channels: Shows all currently available channels.
■ 📑 Added Channels: Shows all added channels.
■ ♥ Favourites: Shows all favourite channels.
■ 🕐 Programmed: Shows all currently reserved Programmes.

✎ Using the remote control buttons with the Channel List
• Green (Zoom): Enlarges or shrinks a channel number.
• Yellow (Select): Selects multiple channel lists. Select desired channels and press the Yellow button to set all the selected channels at the same time. The ✔ mark appears to the left of the selected channels.
• 🔧 (Tools): Displays the Channel List option menu. (The Options menus may differ depending on the situation.)

Channel Status Display icons

Icons	Operations
✔	A channel selected.
♥	A channel set as a favourites.
🔒	A locked channel.
🕐	A reserved programme.

❑ Retuning Channels

Area

You can change the desired area.

Auto Store

(depending on the country)
Scans for a channel automatically and stores in the TV.
✎ Automatically allocated programme numbers may not correspond to actual or desired programme numbers. If a channel is locked, the PIN input window appears.

Manual Store

Scans for a channel manually and stores in the TV.
✎ If a channel is locked, the PIN input window appears.
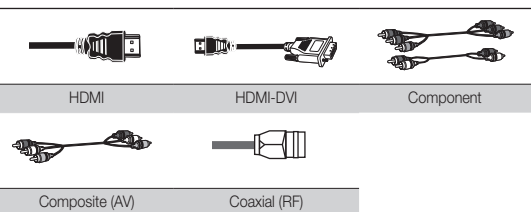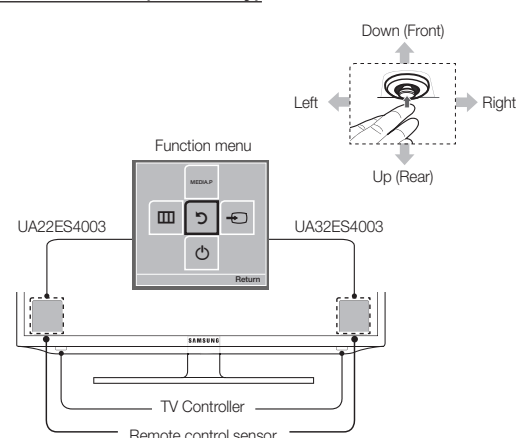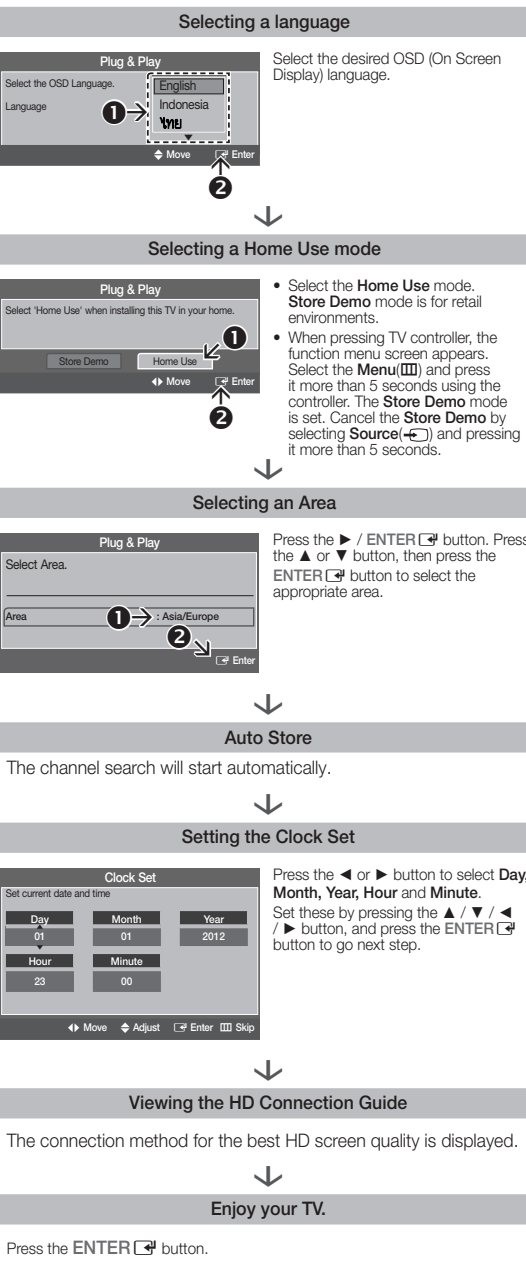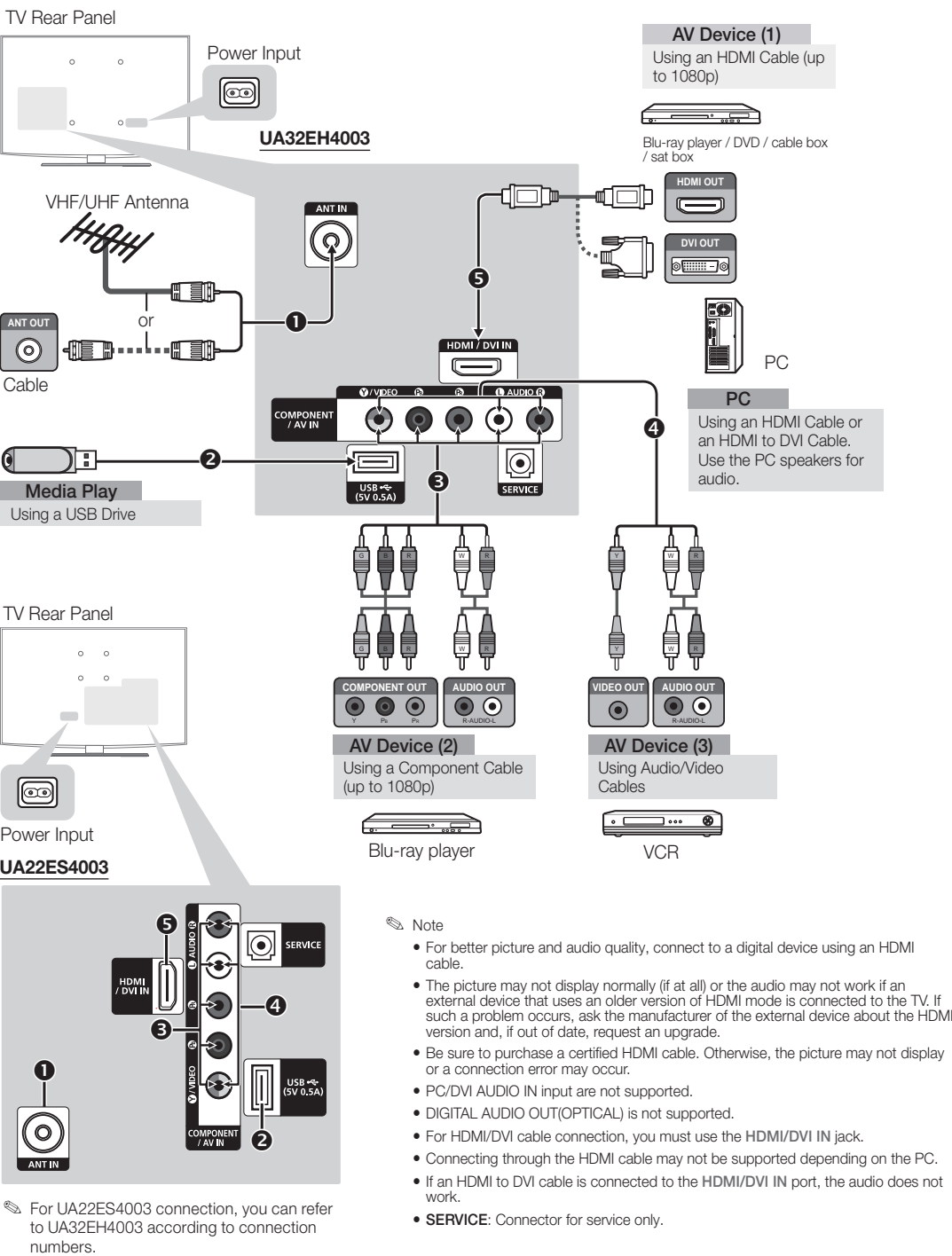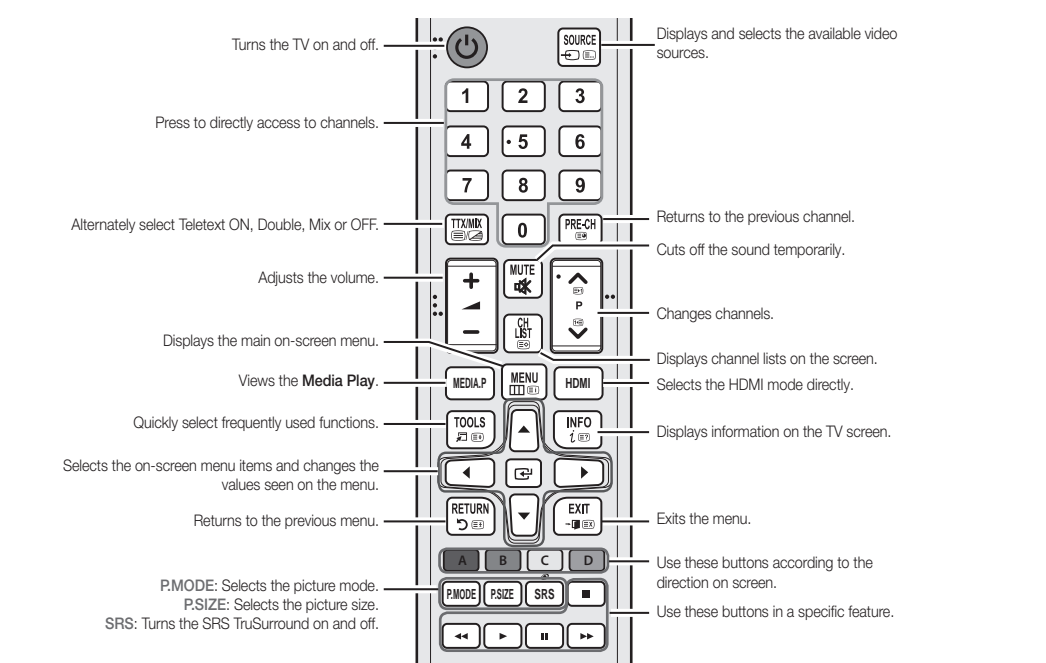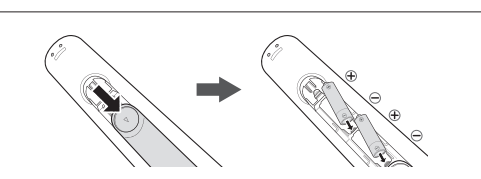✎ According to channel source, Manual Store may be supported.

■ Programme, Colour System, Sound System, Channel, Search, Store: If there is abnormal sound or no sound, reselect the sound standard required.

■ Channel mode
• P (Programme): When tuning is complete, the broadcasting stations in your area have been assigned to position numbers from P0 to P99. You can select a channel by entering the position number in this mode.
• C (aerial channel mode) / S (cable channel mode): These two modes allow you to select a channel by entering the assigned number for each aerial broadcasting station or cable channel.

■ Add / Delete: Delete or add a channel to display the channels you want.
✎ All deleted channels will be shown on the All Channels menu.
✎ A gray-Coloured channel indicates the channel has been deleted.
✎ The Add menu only appears for deleted channels.
✎ Delete a channel from the Added Channels or Favourites menu in the same manner.

■ Add to Favourite / Delete from Favourite TOOLS🔧: Set channels you watch frequently as favourites

■ Timer Viewing: You can set a desired channel to be displayed automatically at the set time; even when you are watching another channel. Set the current time first to use this function.

■ Edit Channel Name: Assign your own channel name.

■ Sort: This operation allows you to change the programme numbers of the stored channels. This operation may be necessary after using the auto store.

■ Lock / Unlock: Lock a channel so that the channel cannot be selected and viewed.
✎ This function is available only when the Channel Lock is set to On.
✎ The PIN input screen appears. Enter your 4-digit PIN, the default of which is "0-0-0-0". Change the PIN using the Change PIN option.

■ Select All / Deselect All: You can select or deselect all channels in the channel list.

■ Auto Store: Scans for a channel automatically and stores in the TV.

Channel Mode

Channels will be switched within the favourite or memorised channel list.
■ Added Channels: Shows all added channels.
■ Favourite Ch.: Shows all favourite channels.

Fine Tune

If the reception is clear, you do not have to fine tune the channel, as this is done automatically during the search and store operation. If the signal is weak or distorted, fine tune the channel manually.
✎ Fine tuned channels that have been saved are marked with an asterisk "*" on the right-hand side of the channel number in the channel banner.
✎ To reset the fine-tuning, select Reset.

Picture Menu

Mode TOOLS🔧

Select your preferred picture type.
■ Dynamic: Suitable for a bright room.
■ Standard: Suitable for a normal environment.
■ Movie: Suitable for watching movies in a dark room.

Samsung MagicAngle for LED 4 series 22 inches

Adjust screen viewing Angle to optimize screen quality according to your viewing position.
■ Samsung MagicAngle: When viewing the screen at an angle from below or above by setting the appropriate mode for each position you can obtain a similar picture quality as viewing the screen directly from the front.
Off: Select when viewing from the front position.
Lean Back Mode: Select when viewing from a slightly lower position.
Standing Mode: Select when viewing from the upper position.
■ Mode: Adjust screen viewing angle.
✎ When Samsung MagicAngle is set to Lean Back Mode or Standing Mode, Gamma is not available.

Backlight / Contrast / Brightness / Sharpness / Colour / Tint (G/R)

Your television has several setting options for picture quality control.

Advanced Settings

(available in Standard / Movie mode)
Compared to previous models, new Samsung TVs have a more precise picture.
■ Colour Space (Auto / Native): Adjusts the range of colours available to create the image.
■ White Balance: Adjust the colour temperature for a more natural picture.
R-Offset / G-Offset / B-Offset: Adjust each colour's (red, green, blue) darkness.
R-Gain / G-Gain / B-Gain: Adjust each colour's (red, green, blue) brightness.
Reset: Resets the White Balance to its default settings.
■ Gamma: Adjusts the primary colour intensity.
■ Dynamic Contrast (Off / Low / Medium / High): Adjusts the screen contrast.
■ Black Tone (Off / Dark / Darker / Darkest): Select the black level to adjust the screen depth.
■ Flesh Tone: Emphasize pink "Flesh Tone".
■ Motion Lighting (Off / On): Reduce power consumption by brightness control adapted motion.
✎ Only available in Standard mode.

Picture Options

■ Colour Tone (Cool / Standard / Warm1 / Warm2)
✎ Warm1 or Warm2 will be deactivated when the picture mode is Dynamic.
■ Size: Your cable box/satellite receiver may have its own set of screen sizes as well. However, we highly recommend you use 16:9 mode most of the time.
16:9: Sets the picture to 16:9 wide mode.
Wide Zoom: Magnifies the picture size more than 4:3.
✎ Adjusts the Position by using ▲, ▼ buttons.
Zoom: Magnifies the 16:9 wide pictures vertically to fit the screen size.
4:3: Sets the picture to basic (4:3) mode.
✎ Do not watch in 4:3 format for a long time. Traces of borders displayed on the left, right and centre of the screen may cause image retention (screen burn) which are not covered by the warranty.
Screen Fit: Displays the full image without any cut-off when HDMI (720p / 1080i / 1080p) or Component (1080i / 1080p) signals are inputted.
✎ NOTE
• After selecting Screen Fit in HDMI (1080i / 1080p) or Component (1080i / 1080p) mode: Adjusts the Position or Size by using ▲, ▼, ◄, ► button.
• Depending on the input source, the picture size options may vary.
• The available items may differ depending on the selected mode.
• Settings can be adjusted and stored for each external device connected to an input on the TV.
• If you use the Screen Fit function with HDMI 720p input, 1 line will be cut at the top, bottom, left and right as in the overscan function.
■ Digital Noise Filter (Off / Low / Medium / High / Auto): If the broadcast signal received by your TV is weak, you can activate the Digital Noise Filter feature to reduce any static and ghosting that may appear on the screen.
✎ When the signal is weak, try other options until the best picture is displayed.
■ HDMI Black Level (Normal / Low): Selects the black level on the screen to adjust the screen depth.
✎ Available only in HDMI mode (RGB signals).
■ Film Mode (Off / Auto): Sets the TV to automatically sense and process film signals from all sources and adjust the picture for optimum quality.
✎ Available in TV mode, AV, COMPONENT (480i / 1080i) and HDMI (480i / 1080i).
■ LED Motion Plus (Off / On): Removes drag from fast scenes with a lot of movement to provide a clear picture.

Picture Reset

Resets your current picture mode to its default settings.
■ Reset Picture Mode: Returns all picture values in the currently selected mode to the default settings.

Sound Menu

Mode TOOLS🔧

■ Standard: Selects the normal sound mode.
■ Music: Emphasizes music over voices.
■ Movie: Provides the best sound for movies.
■ Clear Voice: Emphasizes voices over other sounds.
■ Amplify: Increase the intensity of high-frequency sound to allow a better listening experience for the hearing impaired.

Equalizer

(standard sound mode only)
■ Balance: Adjusts the balance between the right and left speaker.
■ 100Hz / 300Hz / 1KHz / 3KHz / 10KHz (Bandwidth Adjustment): Adjusts the level of specific bandwidth frequencies.
■ Reset: Resets the equalizer to its default settings.

SRS TruSurround HD TOOLS🔧

(standard sound mode only)
This function provides a virtual 5.1 channel surround sound experience through a pair of speakers using HRTF (Head Related Transfer Function) technology.

Auto Volume

Because each broadcasting station has its own signal conditions, the volume may fluctuate each time channel is changed. This feature lets you automatically adjust the volume of the desired channel by lowering the sound output when the modulation signal is high or by raising the sound output when the modulation signal is low.

Selecting the Sound Mode TOOLS🔧

When you set to Dual I-II, the current sound mode is displayed on the screen.

	Audio Type	Dual I-II	Default
A2 Stereo	Mono	Mono	Automatic change
	Stereo	Stereo ↔ Mono	
	Dual	Dual I ↔ Dual II	Dual I
NICAM Stereo	Mono	Mono	Automatic change
	Stereo	Mono ↔ Stereo	
	Dual	Mono ↔ Dual I ↳ Dual II ↲	Dual I

✎ If the stereo signal is weak and an automatic switching, occurs, then switch to the mono.
✎ Only activated in stereo sound signal.
✎ This function is available for all input sources.

Sound Reset

■ Reset All: Reset all sound settings to the factory defaults.

Setup Menu

❑ Setting the Time

Time

✎ The current time will appear every time you press the INFO button.
■ Clock Set: Set the Day, Month, Year, Hour, Minute.
■ Sleep Timer TOOLS🔧
Automatically shuts off the TV after a preset period of time. (30, 60, 90, 120, 150 and 180 minutes).
✎ To cancel Sleep Timer, select Off.

Timer 1 / Timer 2 / Timer 3

Three different on / off timer settings can be made. You must set the clock first.
■ On Time / Off Time: Set the hour, minute and Activate / Inactivate. (To activate the timer with the setting you have chosen, set to Activate.)
■ Volume: Set the desired volume level.
■ Contents: When the On Time is activated, you can turn on a specific channel or play back contents such as photo or audio files.
- TV/USB: Select TV or USB. (Make sure that an USB device is connected to your TV.)
- Antenna: Displays the current antenna source.
- Channel: Select the desired channel.
- Music/Photo: Select the folder containing MP3/JPEG files on the USB device.
✎ The maximum displayed number of files, including sub folders, in one folder of USB storage device is 2000.
✎ The media may not be playing smoothly when using the device lower than USB 2.0.
■ Repeat: Select Once, Everyday, Mon~Fri, Mon~Sat, Sat~Sun or Manual to set at your convenience. If you select Manual, you can set up the day you want to activate the timer.

Security

✎ The PIN input screen appears before the setup screen.
✎ Enter your 4-digit PIN, the default of which is "0-0-0-0". Change the PIN using the Change PIN option.
■ Child Lock (Off / On): Lock channels in Channel List, to prevent unauthorized users, such as children, from watching unsuitable programme.
✎ Only available when the Input source is set to TV.
■ Change PIN: Change your password required to set up the TV.
✎ If you forget the PIN code, press the remote control buttons in the following sequence in Standby mode, which resets the PIN to "0-0-0-0": MUTE → 8 → 2 → 4 → POWER (on).

Language

Set the menu language.
✎ Select Language and press the ENTER⏎ button.

Eco Solution

■ Energy Saving TOOLS🔧 (Off / Low / Medium / High / Picture Off) : This adjusts the brightness of the TV in order to reduce power consumption. If you select Picture Off, the screen is turned off, but the sound remains on. Press any button except volume button to turn on the screen.
■ No Signal Power Off (Off / 15 min / 30 min / 60 min): To avoid unnecessary energy consumption, set how long you want the TV to remain on if it's not receiving a signal.
✎ Disabled when the PC is in power saving mode.
■ Auto Power Off (Off / On): The TV will be automatically turned off when no user operation is received for 4 hours.

Auto Protection Time

■ Auto Protection Time (Off / 2 hours / 4 hours / 8 hours / 10 hours): If the screen remains idle with a still image for a certain period of time defined by the user, the screen saver is activated to prevent the formation of ghost images on the screen.

General

■ Game Mode (Off/On): When connecting to a game console such as PlayStation™ or Xbox™, you can enjoy a more realistic gaming experience by selecting the game mode.
• Precautions and limitations for game mode
- To disconnect the game console and connect another external device, set Game Mode to Off in the setup menu.
- If you display the TV menu in Game Mode, the screen shakes slightly.
• Game Mode is not available in TV mode.
• After connecting the game console, set Game Mode to On to prevent poor picture quality. Unfortunately, you may notice reduced picture quality
■ Melody: Set so that a melody plays when the TV is turned off. Low, Medium and High.
✎ The Melody does not play.
- When no sound is output from the TV because the MUTE button has been pressed.
- When no sound is output from the TV because the volume has been reduced to minimum with the VOL – button.
- When the TV is turned off by Sleep Timer function.

Support Menu

Self Diagnosis

■ Picture Test: Use to check for picture problems. If the problem continues to occur, check the colour pattern.
■ Sound Test: Use the built-in melody sound to check for sound problems.
■ Reset: Reset all settings to the factory defaults.
✎ The PIN input screen appears before the setup screen.
✎ Enter your 4-digit PIN. Change the PIN using the Change PIN option.

Software Upgrade

Software Upgrade can be performed by downloading the latest firmware from "www.samsung.com" to a USB memory device.

HD Connection Guide

Refer to this information when connecting external devices to the TV.

Contact Samsung

View this information when your TV does not work properly or when you want to upgrade the software. You can find information regarding our call centres, and how to download products and software.
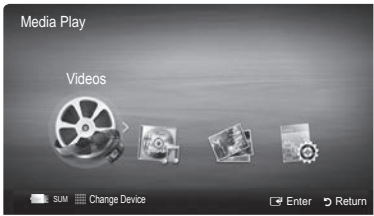
Media Play

Enjoy photos, music and/or movie files saved on a USB Mass Storage Class (MSC) device.

❑ Connecting a USB Device

1. Turn on your TV.
2. Connect a USB device containing photo, music and/or movie files to the USB jack on the side of the TV.
3. When USB is connected to the TV, you can select **Media Play**.

❑ Using the Media Play Menu

Media Play

Videos

1. Press the MENU button. Press the ▲ or ▼ button to select **Application**, then press the ENTER ↵ button.
2. Press the ▲ or ▼ button to select **Media Play (USB)**, then press the ENTER ↵ button.
3. Press the ◄ or ► button to select an icon (**Videos, Music, Photos, Settings**), then press the ENTER ↵ button.

✎ It might not work properly with unlicenced multimedia files.

✎ If you want to view detailed information of the file or connected device, press TOOLS button in the file list, and then select **Detailed Information** or **Device Information**.

✎ Need-to-Know List before using **Media Play (USB)**
- The file system supports NTFS (Read Only), FAT16 and FAT32.
- Certain types of USB Digital camera and audio devices may not be compatible with this TV.
- **Media Play** only supports USB Mass Storage Class (MSC) devices. MSC is a Mass Storage Class Bulk-Only Transport device. Examples of MSC are Thumb drives and Flash Card Readers. Devices should be connected directly to the TV's USB port. USB HDD is not supported.
- Before connecting your device to the TV, please back up your files to prevent them from damage or loss of data. SAMSUNG is not responsible for any data file damage or data loss.
- A USB device that requires high power (more than 0.5A) may not be supported.
- Do not disconnect the USB device while it is loading.
- The higher the resolution of the image, the longer it takes to display on the screen.
- If a file is corrupted or the TV does not support the file type, the "Not Supported File Format" message appears.
- If a USB extension cable is used, the USB device may not be recognized or the files on the device may not be read.

- The TV cannot play MP3 files with DRM that have been downloaded from a for-pay site. Digital Rights Management (DRM) is a technology that supports the creation, distribution, and management of digital content in an integrated and comprehensive way, including protecting the rights and interests of content providers, preventing illegal copying of contents, and managing billings and settlements.
- PTP device is not supported.
- If an over-power warning message is displayed while you are connecting or using a USB device, the device may not be recognized or may malfunction.
- If the TV has no input during the time set in **Auto Protection Time**, the Screensaver will run.
- The power-saving mode of some external hard disk drives may be released automatically when your connect them to the TV.
- If a USB device connected to the TV is not recognized, the list of files on the device is corrupted, or a file in the list is not played, connect the USB device to the PC, format the device, and check the connection.
- If a file you deleted from the PC is still found when you run **Media Play**, use the "Empty the Recycle Bin" function on the PC to permanently delete the file.
- **Photos** only supports sequential jpeg format.
- The scene search and thumbnail functions are not supported in the **Videos**.
- If the number of files and folders saved on a USB storage device is approximately over 4000, the files and folders may not appear and some folders may not be opened.
- The maximum displayed number of files, including sub folders, in one folder of USB storage device is 2000.
- The media may not be playing smoothly when using the device lower than USB 2.0.

Videos

1. Press the ◄ or ► button to select **Videos**, then press the ENTER ↵ button in the **Media Play** menu.
2. Press the ◄/►/▲/▼ button to select the desired video in the file list.
3. Press the ENTER ↵ button or ► (Play) button.
   - The selected file is displayed on the top with its playing time.
   - If video time information is unknown, playing time and the progress bar are not displayed.
   - During video playback, you can search using the ◄ and ► button.
   - You can use (REW) and (FF) buttons during playback.

✎ In this mode, you can play movie clips contained in a game, but you cannot play the game itself.

• Supported Subtitle Formats
- External

Name	File extension
MPEG-4 timed text	.ttxt
SAMI	.smi
SubRip	.srt
SubViewer	.sub
Micro DVD	.sub or .txt
SubStation Alpha	.ssa
Advanced SubStation Alpha	.ass

- Internal

Name	Container	Format
Xsub	AVI	Picture Format
SubStation Alpha	MKV	Text Format
Advanced SubStation Alpha	MKV	Text Format
SubRip	MKV	Text Format
MPEG-4 Timed text	MP4	Text Format

• Supported Video Formats

File Extension	Container	Video Codec	Resolution	Frame rate(fps)	Bit rate(Mbps)	Audio Codec
*.mp4	MP4	DivX 3.11/4.x/5.1/6.0	1920x1080	6~30	30Mbps	MP3 / ADPCM / AAC
		H264	1920x1080	6~30	30Mbps	
		AVC	1920x1080	6~30	30Mbps	
		MJPEG	640x480	6~30	10Mbps	
*.avi *.mkv	AVI MKV	DivX 3.11/4.x/5.1/6.0	1920x1080	6~30	30Mbps	MP3 / AC3 / LPCM / ADPCM / DTS Core
		H264	1920x1080	6~30	30Mbps	
		MJPEG	640x480	6~30	10Mbps	
*.asf *.wmv	ASF	DivX 3.11 / 4.x /5.1 / 6.0	1920x1080	6~30	30Mbps	MP3 / AC3 / LPCM / ADPCM / WMA / WMA Pro
		MPEG4 SP / ASP	1920x1080	6~30	30Mbps	
		H.264	1920x1080	6~30	30Mbps	
*.ts *.tp *.trp	TS	MPEG2	1920x1080	6~30	30Mbps	AC3 / AAC / MP3 / DD+ / HE-AAC
		H.264 BP / MP / HP	1920x1080	6~30	30Mbps	
*.vob	PS	MPEG1	1920x1080	24/25/30	30Mbps	AC3 / MPEG / LPCM / AAC
*.mpg *.mpeg		MPEG2	1920x1080	24/25/30	30Mbps	
		H. 264 BP / MP / HP	1920x1080	6~30	30Mbps	
*.3gp	3GPP	MPEG4 SP / ASP	1920x1080	6~30	30Mbps	MP3
		H.264	1920x1080	6~30	30Mbps	
*.flv *.swf	flash formats	H.264	1920x1080	6~30	30Mbps	MP3
		Sorenson H.263	1920x1080	6~30	30Mbps	

Video Decoder
Supports up to H.264, Level 4.1
H.264 FMO / ASO / RS, VC1 SP / MP / AP L4 and AVCHD are not supported.
- Below 1280 x 720: 60 frame max
- Above 1280 x 720: 30 frame max
H.263 is not supported.
GMC is not supported.

Audio Decoder
Supports up to WMA7, 8, 9 STD, 9 PRO, 10 PRO
WMA 9 PRO and WMA 10 PRO support 5.1 channel. (LBR mode of WMA Pro is not supported)
WMA Lossless is not supported.

Music

I Love You
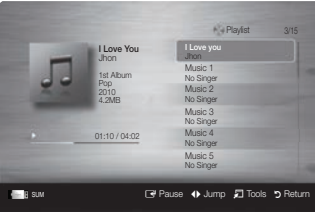
1. Press the ◄ or ► button to select **Music**, then press the ENTER ↵ button in the **Media Play** menu.
2. Press the ◄/►/▲/▼ button to select the desired Music in the file list.
3. Press the ENTER ↵ button or ► (Play) button.

✎ During music playback, you can search using the ◄ and ► button.

✎ (REW) and (FF) buttons do not function during play.

✎ Only displays the files with MP3 and PCM file extension. Other file extensions are not displayed, even if they are saved on the same USB device.

✎ If the sound is abnormal when playing MP3 files, adjust the **Equalizer** in the **Sound** menu. (An over-modulated MP3 file may cause a sound problem.)

Other Restrictions

✎ **NOTE**
- Video content will not play, or not play correctly, if there is an error in the content or the container.
- Sound or video may not work if the contents have a standard bit rate/ frame rate above the compatible Frame/sec listed in the table above.
- If the Index Table is in error, the Seek (Jump) function is not supported.
- The menu may take longer to appear if the video's bit rate exceeds 10Mbps.
- Video content can not be played, if there are many contents in one file.

Photos

1. Press the ◄ or ► button to select **Photos**, then press the ENTER ↵ button in the **Media Play** menu.
2. Press the ◄/►/▲/▼ button to select the desired photo in the file list.
3. Press the ENTER ↵ button or ► (Play) button.

✎ **NOTE**
- While a photo list is displayed, press the ► (Play) / ENTER ↵ button on the remote control to start the slide show.
- All files in the file list section will be displayed in the slide show.
- During the slide show, files are displayed in order.
- During the slide show, you can adjust the slide show speed using (◄◄) (REW) or (►►) (FF) button.
- You can move to other file using ◄ or ► button.

✎ Music files can be automatically played during the Slide Show if the **Background Music** is set to **On**.

✎ The **Mode** in **Background Music** cannot be changed until the BGM has finished loading.

• Supported Photo Formats

Image	Type	Resolution
JPEG	Base-line	15360 x 8704
	Progressive	1024 x 768

Other Restrictions
- CMYK, YCCK Colour space JPEG are not supported.

Playing Multiple Files

■ Playing selected video/music/photo files

1. Press the Yellow button in the file list to select the desired file.
2. Repeat the above operation to select multiple files.

✎ **NOTE**
- The ✓ mark appears to the left of the selected files.
- To cancel a selection, press the Yellow button again.
- To deselect all selected files, press the TOOLS button and select **Deselect All**.

3. Press the TOOLS button, and then select **Play Selected Contents**.

■ Playing the video/music/photo file group
While a file list is displayed, move to any file in desired group.

Media Play - Additional Functions

■ Media Play/Music/Photos Play Option menus
When playing a file, press the TOOLS button.

Category	Operation	Videos	Music	Photos
Title	You can move the other file directly.	✓		
Repeat Mode	You can play movie and music files repeatedly.	✓	✓	
Picture Size	You can adjust the picture size to your preference.	✓		
Picture Mode	You can adjust the picture setting.	✓		✓
Sound Mode	You can adjust the sound setting.	✓	✓	✓
Subtitle Setting	You can play the video with Subtitles. This function only works if the subtitles are the same file name as the video.	✓		
Audio Language	You can change the audio language if the video has more than one language.	✓		
Stop Slide Show / Start Slide Show	You can start or stop a Slide Show.			✓
Slide Show Speed	You can select the slide show speed during the slide show.			✓
Background Music	You can set and select background music when watching a Slide Show.			✓
Zoom	You can zoom into images in full screen mode.			✓
Rotate	You can rotate images in full screen mode.			✓
Information	You can see detailed information about the played file.	✓	✓	✓

Settings

Using the Setup Menu
■ **Information**: Select to view information on the connected device.

Other Information

Installing the Wall Mount Kit

The wall mount kit (sold separately) allows you to mount the TV on the wall. For detailed information on installing the wall mount, see the instructions provided with the wall mount. Contact a technician for assistance when installing the wall mount bracket.

Samsung Electronics is not responsible for any damage to the product or injury to yourself or others if you elect to install the TV on your own.

Wall Mount Kit Specifications (VESA)

✎ The wall mount kit is not supplied, but sold separately.

Install your wall mount on a solid wall perpendicular to the floor. When attaching to other building materials, please contact your nearest dealer. If you install the TV on a ceiling or slanted wall, it may fall and result in severe personal injury.

✎ **NOTE**
- Standard dimensions for wall mount kits are shown in the table below.
- When purchasing our wall mount kit, a detailed installation manual and all parts necessary for assembly are provided.
- Do not use screws that do not comply with the VESA standard screw specifications.
- Do not use screws longer than the standard dimension, as they may cause damage to the inside of the TV set.
- For wall mounts that do not comply with the VESA standard screw specifications, the length of the screws may differ depending on the wall mount specifications.
- Do not fasten the screws too firmly. This may damage the product or cause the product to fall, leading to personal injury. Samsung is not liable for these kinds of accidents.
- Samsung is not liable for product damage or personal injury when a non-VESA or non-specified wall mount is used or the consumer fails to follow the product installation instructions.
- Do not mount the TV at more than a 15 degree tilt.
- Always have two people mount the TV on a wall.

Product Family	TV size in inches	VESA screw hole specs (A * B) in millimeters	Standard Screw	Quantity
LED-TV	19~22	75 X 75	M4	4
	26	100 X 100		
	32~40	200 X 200	M6	
	46~60	400 X 400	M8	
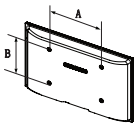
Do not install your Wall Mount Kit while your TV is turned on. It may result in personal injury due to electric shock.

Securing the TV to the Wall

⚠ **Caution**: Pulling, pushing, or climbing onto the TV may cause the TV to fall. In particular, ensure that your children do not hang over or destabilize the TV; doing so may cause the TV to tip over, resulting in serious injuries or death. Follow all safety precautions provided on the included Safety Flyer. For added stability, install the anti-fall device for safety purposes, as follows.

To prevent the TV from falling

✎ Since the necessary clamps, screws, and string are not supplied, please purchase these additionally.

1. Put the screws into the clamps and firmly fasten them onto the wall. Confirm that the screws have been firmly installed onto the wall.
   ✎ You may need additional material such as an anchor depending on the type of wall.
   ✎ Since the necessary clamps, screws, and string are not supplied, please purchase these additionally.
2. Remove the screws from the back Centre of the TV, put the screws into the clamps, and then fasten the screws onto the TV again.
   ✎ Screws may not be supplied with the product. In this case, please purchase the screws of the following specifications.
3. Connect the clamps fixed onto the TV and the clamps fixed onto the wall with a strong cable and then tie the string tightly.
   ✎ **Note**
   - Install the TV near to the wall so that it does not fall backwards.
   - It is safe to connect the string so that the clamps fixed on the wall are equal to or lower than the clamps fixed on the TV.
   - Untie the string before moving the TV.
4. Verify all connections are properly secured. Periodically check connections for any sign of fatigue for failure. If you have any doubt about the security of your connections, contact a professional installer.

Kensington Lock

The Kensington Lock is not supplied by Samsung. It is a device used to physically fix the system when using it in a public place. Refer to the manual provided with the Kensington Lock for additional information on proper use.

✎ Please find a 🔒 icon on the rear of the TV. The Kensington slot is beside the 🔒 icon.

✎ The position and colour may differ depending on the model.

To lock the product, follow these steps:

1. Wrap the Kensington lock cable around a large, stationary object such as desk or chair.
2. Slide the end of the cable with the lock attached through the looped end of the Kensington lock cable.
3. Insert the locking device into the Kensington slot on the product.
4. Lock the lock.

✎ These are general instructions. For exact instructions, see the User manual supplied with the locking device.

✎ The locking device has to be purchased separately.

✎ The location of the Kensington slot may be different depending on the TV model.

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Troubleshooting

If you have any questions about the TV, first refer to this list. If none of these troubleshooting tips apply, please visit "www.samsung.com," then click on Support, or contact the call centre listed on the back-cover of this manual.

Problem	Possible Solution
Picture Quality	
The TV image does not look as good as it did in the store.	• If you have an analogue cable/set top box, upgrade to a digital set top box. Use HDMI or Component cables to deliver HD (high definition) picture quality. • Cable/Satellite subscribers: Try HD stations from the channel line up. • Antenna connection: Try HD stations after performing Auto tuning. ✎ Many HD channels are up scaled from SD(Standard Definition) contents. • Adjust the Cable/Set top box video output resolution to 1080i or 720p. • Make sure you are watching the TV at the minimum recommended distance based on the size and definition of the signal.
The picture is distorted: macroblock error, small block, dots, pixelization	• Compression of video contents may cause picture distortion especially in fast moving pictures such as sports and action movies. • Low signal level or bad quality can cause picture distortion. This is not a TV issue. • Mobile phones used close to the TV (cca up to 1m) may cause noise in picture on analogue and digital TV.
Colour is wrong or missing.	• If you're using a component connection, make sure the component cables are connected to the correct jacks. Incorrect or loose connections may cause colour problems or a blank screen.
There is poor colour or brightness.	• Adjust the **Picture** options in the TV menu. (go to **Picture mode / Colour / Brightness / Sharpness**) • Adjust **Energy Saving** option in the TV menu. (go to MENU - **Setup -Eco Solution - Energy Saving**) • Try resetting the picture to view the default picture settings. (go to MENU - **Picture - Picture Reset**)
There is a dotted line on the edge of the screen.	• If the picture size is set to **Screen Fit**, change it to **16:9**. • Change cable/satellite box resolution.
The picture is black and white.	• If you are using an AV composite input, connect the video cable (yellow) to the Green jack of component input 1 on the TV.
When changing channels, the picture freezes or is distorted or delayed.	• If connected with a cable box, please try to reset the cable box. Reconnect the AC cord and wait until the cable box reboots. It may take up to 20 minutes. • Set the output resolution of the cable box to 1080i or 720p.
Sound Quality	
There is no sound or the sound is too low at maximum volume.	• Please check the volume of the external device connected to your TV.
The picture is good but there is no sound.	• Set the **Speaker Select** option to **TV Speaker** in the sound menu. • If you are using an external device, make sure the audio cables are connected to the correct audio input jacks on the TV. • If you are using an external device, check the device's audio output option (ex. you may need to change your cable box's audio option to HDMI when you have a HDMI connected to your TV). • If you are using a HDMI cable, a separate audio cable is required. • If your TV has a headphone jack, make sure there is nothing plugged into it.
The speakers are making an inappropriate noise.	• Check the cable connections. Make sure a video cable is not connected to an audio input. • For antenna or cable connections, check the signal strength. Low signal level may cause sound distortion.
No Picture, No Video	
The TV will not turn on.	• Make sure the AC power cord is securely plugged in to the wall outlet and the TV. • Make sure the wall outlet is working. • Try pressing the POWER button on the TV to make sure the problem is not the remote. If the TV turns on, refer to "The remote control does not work" below.
The TV turns off automatically.	• Ensure the **Sleep Timer** is set to **Off** in the **Time** menu. • If your PC is connected to the TV, check your PC power settings. • Make sure the AC power cord is plugged in securely to the wall outlet and the TV. • When watching TV from an antenna or cable connection, the TV will turn off after 10 – 15 minutes if there is no signal.
There is no picture/video.	• Check cable connections (remove and reconnect all cables connected to the TV and external devices). • Set your external devices' (Cable/Set top Box, DVD, Blu-ray etc) video outputs to match the connections to the TV input. For example, if an external device's output is HDMI, it should be connected to an HDMI input on the TV. • Make sure your connected devices are powered on. • Be sure to select the TV's correct source by pressing the SOURCE button on the TV remote.

Problem	Possible Solution
RF(Cable/Antenna) Connection	
The TV is not receiving all channels.	• Make sure the Antenna cable is connected securely. • Please try **Plug & Play** (Initial setup) to add available channels to the channel list. Go to MENU - **Setup - Plug & Play** (Initial setup) and wait for all available channels to be stored. • Verify the Antenna is positioned correctly.
The picture is distorted: macroblock error, small block, dots, pixelization	• Compression of video contents may cause picture distortion, especially on fast moving pictures such as sports and action movies. • A low signal can cause picture distortion. This is not a TV issue.
PC Connection	
A "**Mode Not Supported**" message appears.	• Set your PC's output resolution so it matches the resolutions supported by the TV.
The video is OK but there is no audio.	• If you are using a HDMI connection, check the audio output setting on your PC.
Others	
The picture will not display in full screen.	• HD channels will have black bars on either side of the screen when displaying up scaled SD (4:3) contents. • Black bars on the top and bottom will appear during movies that have aspect ratios different from your TV. • Adjust the picture size options on your external device or TV to full screen.
The remote control does not work.	• Replace the remote control batteries with the poles (+/–) in the right direction. • Clean the transmission window located on the top of the remote control. • Try pointing the remote directly at the TV from 5–6 feet away.
The cable/set top box remote control does not turn the TV on or off, or adjust the volume.	• Programme the Cable/Set top box remote control to operate the TV. Refer to the Cable/Set top box user manual for the SAMSUNG TV code.
A "**Mode Not Supported**" message appears.	• Check the supported resolution of the TV, and adjust the external device's output resolution accordingly. Refer to resolution settings in this manual.
There is a plastic smell from the TV.	• This smell is normal and will dissipate over time.
TV is tilted to the right or left side.	• Remove the stand base from the TV and reassemble it.
There are difficulties assembling the stand base.	• Make sure the TV is placed on a flat surface. It is necessary to use magnetized screw driver if you cannot remove the screws from the TV.
The **Channel** menu is grey out (unavailable).	• The **Channel** menu is only available when the TV source is selected.
Your settings are lost after 30 minutes or every time the TV is turned off.	• If the TV is in the **Store Demo** mode, it will reset audio and picture settings every 30 minutes. Change the settings from **Store Demo** mode to **Home Use** mode in the **Plug & Play** (Initial setup) procedure. Press the SOURCE button to select **TV** mode, go to MENU → **Setup** → **Plug & Play** (Initial setup) → ENTER ↵.
You have intermittent loss of audio or video.	• Check the cable connections and reconnect them. • Loss of audio or video can be caused by using overly rigid or thick cables. Make sure the cables are flexible enough for long term use. If mounting the TV to the wall, we recommend using cables with 90 degree connectors.
You see small particles when you look closely at the edge of the frame of the TV.	• This is part of the product's design and is not a defect.
There are recurrent picture/sound issues.	• Check and change the signal/source.
A reaction may occur between the rubber cushion pads on the base stand and the top finish of some furniture.	• To prevent this, use felt pads on any surface of the TV that comes in direct contact with furniture.

✎ This TFT LED panel uses a panel consisting of sub pixels which require sophisticated technology to produce. However, there may be a few bright or dark pixels on the screen. These pixels will have no impact on the performance of the product.

✎ You can keep your TV as optimum condition to upgrade the latest firmware on web site (samsung.com → Support → Downloads) by USB.

Assembling the Holder-Wire stand

Storage and Maintenance

✎ If you remove the attached sticker on the TV screen, clean the residues and then watch TV.

Do not spray water directly onto the product. Any liquid that goes into the product may cause a failure, fire, or electric shock.

Clean the product with a soft cloth dampened with in a small amount of water. Do not use a flammable liquid (e.g. benzene, thinners) or a cleaning agent.

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Specifications

Display Resolution	1366 X 768
Environmental Considerations	
Operating Temperature	10°C to 40°C (50°F to 104°F)
Operating Humidity	10% to 80%, non-condensing
Storage Temperature	-20°C to 45°C (-4°F to 113°F)
Storage Humidity	5% to 95%, non-condensing

Model Name	UA22ES4003	UA32EH4003
Screen Size	22 inches	32 inches
Sound Output	3W x 2	5W x 2
Dimensions (W x H x D)		
Body	518.9 X 319.7 X 49.0 (mm)	738.4 X 444.0 X 93.2 (mm)
With stand	518.9 x 354.1 X 123.4 (mm)	738.4 X 497.7 X 191.7 (mm)
Weight		
Without Stand	3.2 kg	5.4 kg
With Stand	3.3 kg	6.0 kg

✎ Design and specifications are subject to change without prior notice.
✎ For information about power supply, and more about power consumption, refer to the label attached to the product.

Display Modes (HDMI/DVI Input)
Optimal resolution is 1366 X 768 @ 60 Hz.

Mode	Resolution	Horizontal Frequency (KHz)	Vertical Frequency (Hz)	Pixel Clock Frequency (MHz)	Sync Polarity (H / V)
IBM	640 x 350	31.469	70.086	25.175	+/-
	720 x 400	31.469	70.087	28.322	-/+
MAC	640 x 480	35.000	66.667	30.240	-/-
	832 x 624	49.726	74.551	57.284	-/-
VESA DMT	640 x 480	31.469	59.940	25.175	-/-
	640 x 480	37.861	72.809	31.500	-/-
	640 x 480	37.500	75.000	31.500	-/-
	800 x 600	37.879	60.317	40.000	+/+
	800 x 600	48.077	72.188	50.000	+/+
	800 x 600	46.875	75.000	49.500	+/+
	1024 x 768	48.363	60.004	65.000	-/-
	1024 x 768	56.476	70.069	75.000	-/-
	1024 x 768	60.023	75.029	78.750	+/+
	1280 x 720	45.000	60.000	74.250	+/+
	1366 x 768	47.712	59.790	85.500	+/+

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